# VERY SHALLOW RANGE SITE

1. TOPOGRAPHY

   a. This site occurs on gently sloping to very steep uplands. Slopes are commonly from 3 to 35 percent.

2. SOILS

   a. These soils have thin surfaces overlying thin channery subsoils. Depth to scoria is 10 inches or less. Effective rooting depth is severely restricted. Available water capacity is very slow.

   b. Soil taxonomic units common to this site are:

      Brandenburg loam and channery loam

      Refer to Section II-A for a complete list of soil taxonomic units and range sites.

3. POTENTIAL VEGETATION

   a. Sparse stands of both cool and warm season midgrasses dominate this site. Principal species are western wheatgrass, needleandthread, little bluestem, and blue grama. Other species are bluebunch wheatgrass, plains muhly, red threeawn, sideoats grama, and upland sedges. Forbs and shrubs make up about 10 percent of the total herbage production.

   b. Under continued heavy grazing by cattle, plants such as western wheatgrass, needleandthread, little bluestem, bluebunch wheatgrass, and plains muhly decrease on this site. Plants that increase under these conditions are blue grama, red threeawn, Sandberg bluegrass, and upland sedges. Continued overuse results in a dominance of blue grama, red threeawn, upland sedges, undesirable forbs and shrubs.

   c. Approximate total annual production of this site in excellent condition is from 350 to 750 pounds of air-dry herbage per acre, depending on growing conditions. Percent of the ground that is covered by living or dead vegetation is about 60 to 80 percent.

   d. A detailed description of the vegetation in excellent condition is as follows:

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Relative Percent Composition of the Potential Vegetation

| | Mean Productivity | |
|---|---|---|
| | lbs/acre | % composition |
| Grasses | | |
| Western wheatgrass | 90 | 15 |
| Needleandthread | 60 | 10 |
| Little bluestem | 60 | 10 |
| Blue grama | 90 | 15 |
| Bluebunch wheatgrass | 30 | 5 |
| Prairie junegrass | 30 | 5 |
| Red threeawn | 30 | 5 |
| Plains muhly | 30 | 5 |
| Sideoats grama | 30 | 5 |
| Sandberg bluegrass<br>Other grasses | 30 | 5 |
| Grasslikes<br>Penn sedge<br>Threadleaf sedge<br>Needleleaf sedge | 60 | 10 |
| Forbs<br>Rush skeletonweed<br>Hoods phlox<br>Hairy goldaster<br>Eriogonum species<br>Prairie thermopsis<br>Other forbs | 30 | 5 |
| Shrubs and half-shrubs<br>Broom snakeweed<br>Common winterfat<br>Skunkbush sumac<br>Creeping juniper<br>Fringed sagebrush<br>Other shrubs | 30 | 5 |
| Total | 600 | 100 |

4. DOMESTIC LIVESTOCK GRAZING VALUE

a. This site has a very low stocking rate potential but is suitable for both cattle and sheep. This site is usually grazed lightly due to the steepness of topography. The best season of grazing is summer and fall.

5. WILDLIFE NATIVE TO THE SITE

a. Big game animals such as the mule deer and white-tailed deer use this site for forage and part of their natural habitat. Some upland songbirds common to this site are the chestnut-collared longspur, meadowlark, and lark bunting.

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6. ESTHETIC AND RELATED VALUES

a. This site is part of the steep and broken topography that is part of the unique scenery that is found in the badlands. Colorful flowering plants and shrubs bloom during spring and summer. Scoria outcrops and varying shades of gray on this site add to the scenery. Recreational uses are hunting, hiking, horseback riding, and rock hounding.

7. HYDROLOGIC CHARACTERISTICS

a. Runoff from this site is medium to rapid on good and excellent condition, properly grazed range, depending upon slopes. The soil has a high rate of water transmission.

8. A TYPICAL SITE LOCATION IN THIS AREA IS AS FOLLOWS